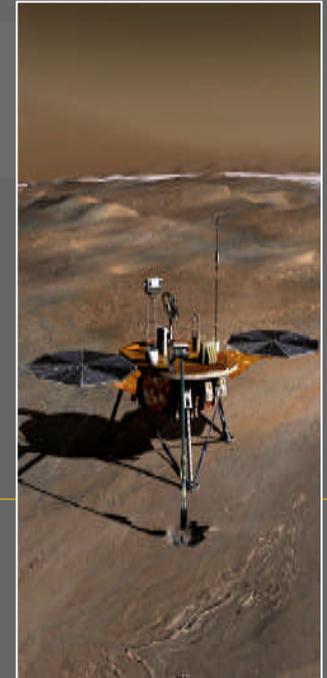
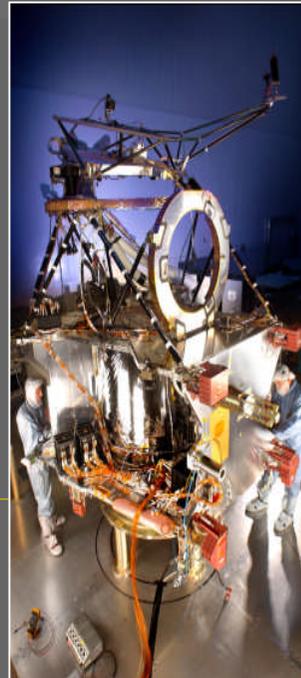
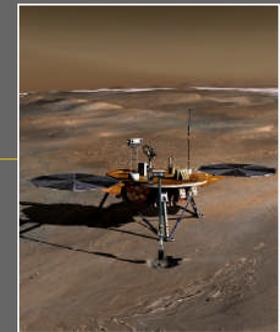
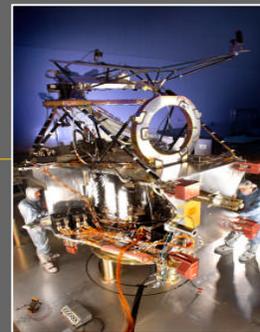


JPL: A Space Trailblazer

Amanda Beckman-Hezel
Acquisition Deputy Division Manager
Jet Propulsion Laboratory



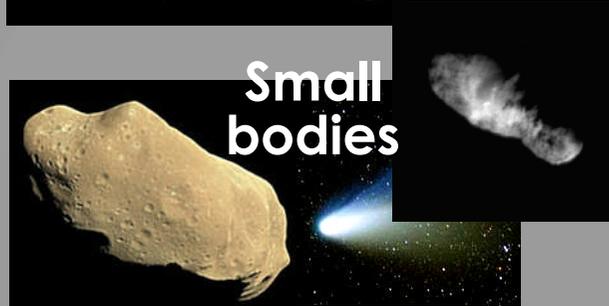
History Speaking for Itself



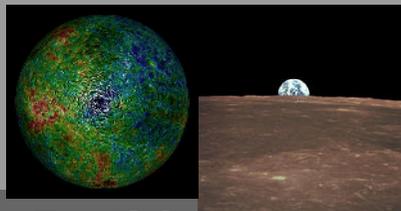
Forty-eight Years of Exploration



Giant planets



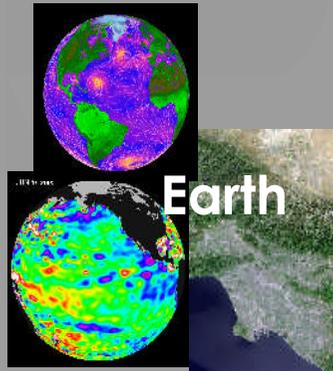
Small bodies



Earth's moon

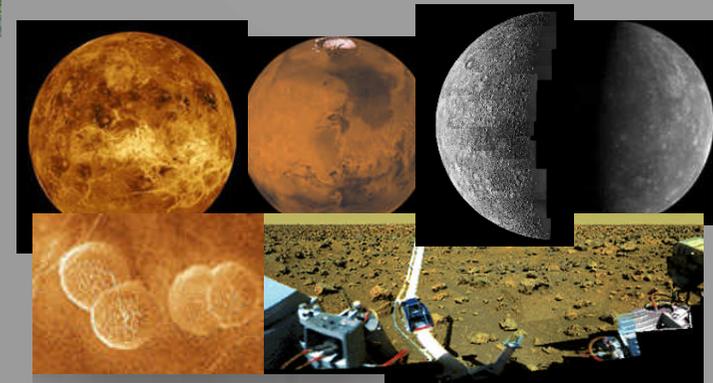
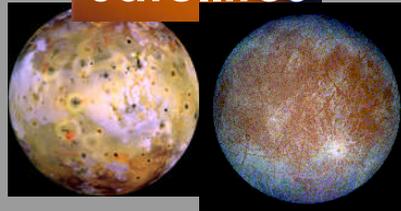


Astrophysics



Earth

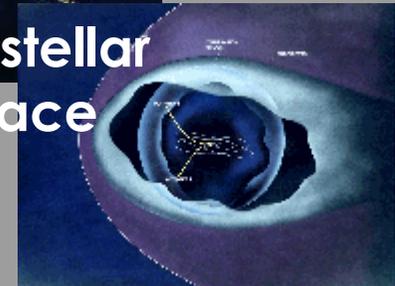
Planetary satellites



Terrestrial planets



Interstellar space



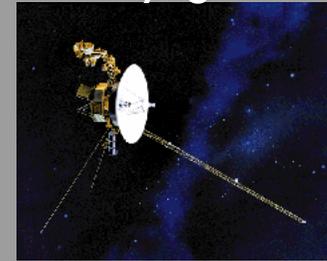
Seventeen Spacecraft and Five Instruments Operating Across the Solar System



Deep Impact



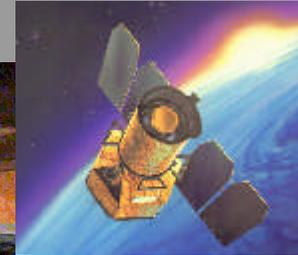
Spitzer studying stars and galaxies in the infrared



Two Voyagers on an interstellar mission

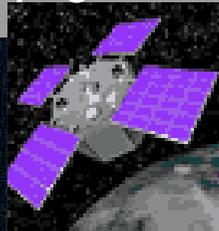


Cassini studying Saturn

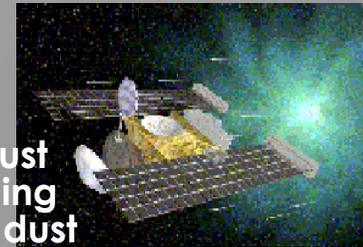


GALEX studying UV universe

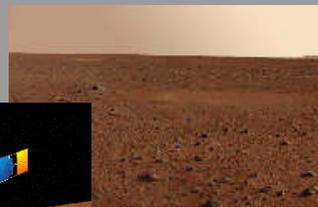
Ulysses, Genesis, and ACRIMSAT studying the sun



Stardust returning comet dust



Mars Global Surveyor and Mars Odyssey orbiters; "Spirit" and "Opportunity" on Mars

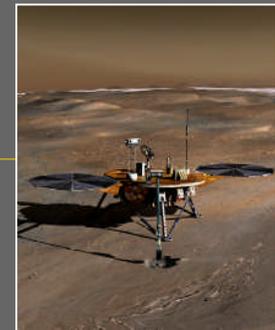
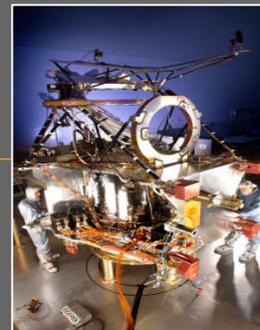


(Plus ASTER, MISR, AIRS, MLS and TES instruments monitoring Earth.)



Topex/Poseidon, QuikSCAT, Jason 1, and GRACE

JPL Working Together



JPL Matrix Organization

Caltech
David Baltimore, President

Jet Propulsion Laboratory
Charles Elachi, Director
Gene Tattini, Deputy Director
Tom Gavin, Associate Director, Flight Projects and Mission Success
Firouz Naderi, Associate Director, Programs, Project Formulation and Strategy
Tom Prince, Chief Scientist
Paul Dimotakis, Chief Technologist

General Counsel
Harry Yohalem

Office of Legislative Affairs
Rich O'Toole, Manager

Exploration Systems and Technology Office
Michael Sander, Manager

Special Assistant
Office of Director
John Casani, Manager

Office of Communications and Education
Blaine Baggett, Manager

Office of Safety and Mission Success
Matt Landano, Director

Chief Information Officer
Jim Rinaldi

- Administrative Operations
- Technical Divisions
- Program/Project Offices

Human Resources Directorate
Cozette Hart, Director
Rick Roessler, Deputy

Business Operations Directorate
Dale Johnson, CFO and Director
Steve Proia, Deputy

Engineering and Science Directorate
John Beckman, Director
Phil Garrison, Deputy

Solar System Exploration Directorate
Chris Jones, Director
John McNamee, Deputy

Mars Exploration Directorate
Fuk Li, Director
Pete Theisinger, Deputy

Astronomy and Physics Directorate
Jakob van Zyl, Director
Leslie Livesay, Deputy

Earth Science and Technology Directorate
Diane Evans, Director
Charlie Yamarone, Deputy

Interplanetary Network Directorate
Bill Weber, Director
William Rafferty, Deputy

Accounting and Finance

Avionic Systems and Technology

Quality Assurance

Etc.

Etc.

Etc.

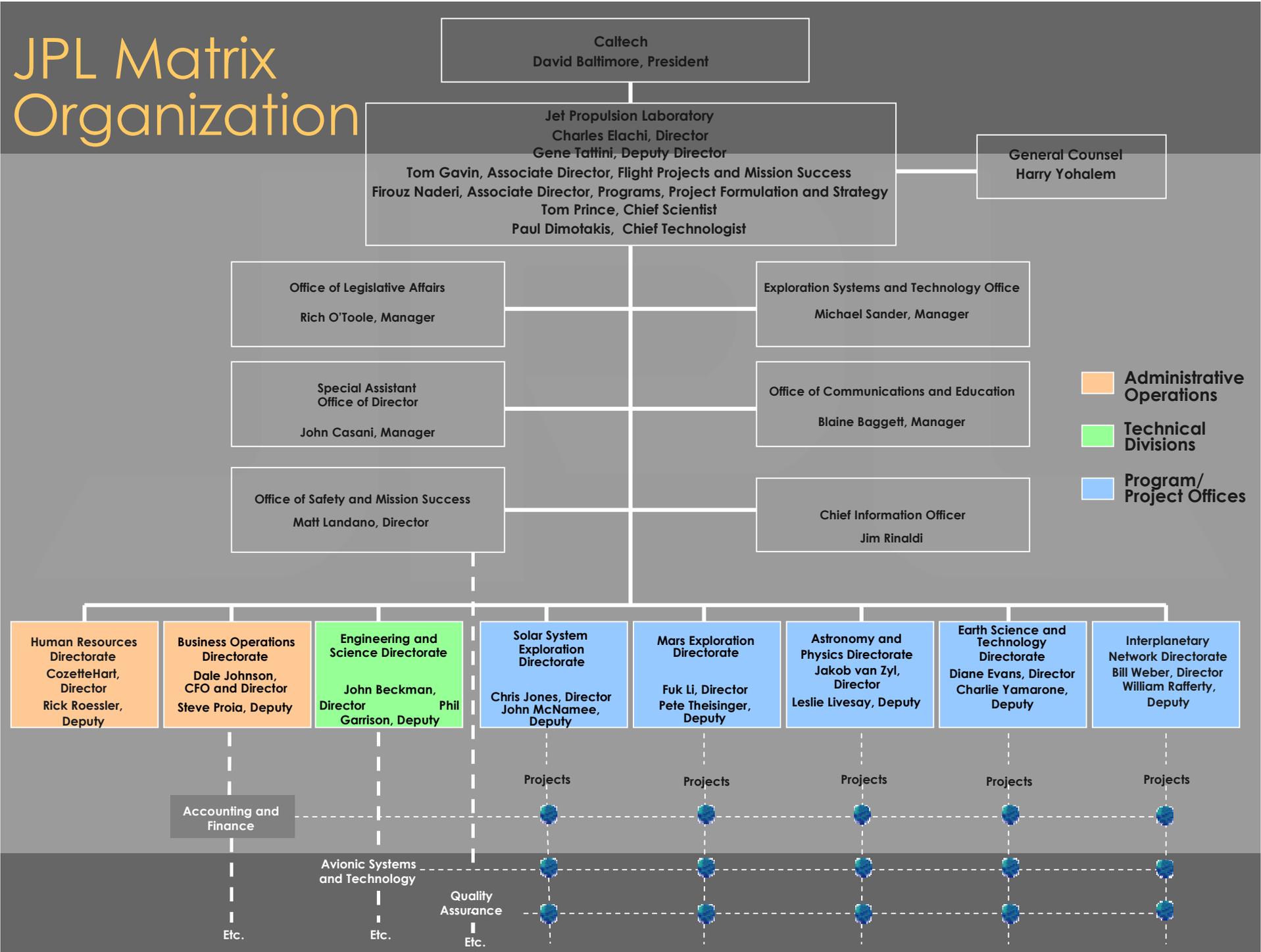
Projects

Projects

Projects

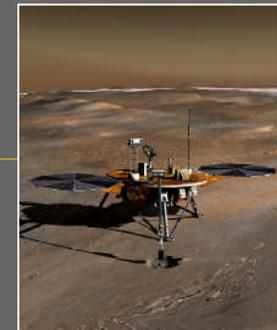
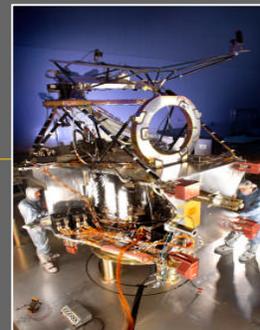
Projects

Projects



Looking Back...

Recent Accomplishments



Celebrated MER 2nd Anniversary

Spirit at top of Husband Hill, preparing for descent into East Basin, December 2005

Image created by inserting rover onto *Spirit* panoramic camera image.



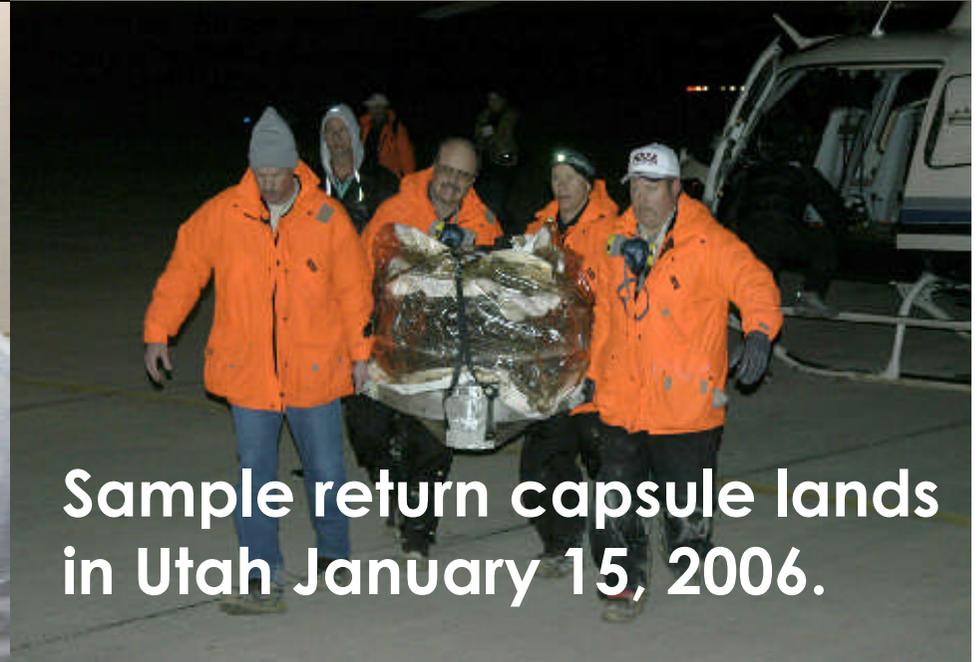
View of Earth from Mars from Spirit Rover (50 million miles away)



Stardust Returns!

Launched February 7, 1999.

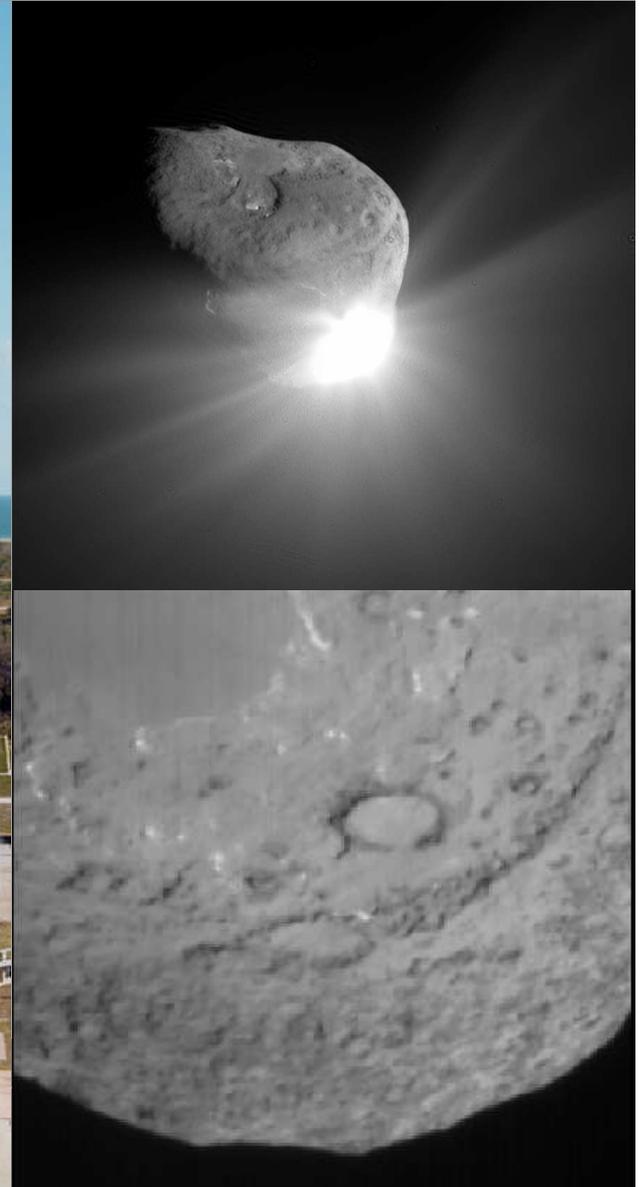
**Grabbed sample of coma
from comet Wild-2 on
January 2, 2004.**



**Sample return capsule lands
in Utah January 15, 2006.**

Deep Impact's Successful Encounter

- Hit Comet Tempel 1 on July 4, 2005.
 - *“We made it look simple, but it was hard and trail-blazing work.”*
- Project well on its way in meeting all level one requirements.
- The most public interest for a JPL mission to date.
- Opportunity to fly by another comet in three years.



Mars Reconnaissance Orbiter (MRO) Launches

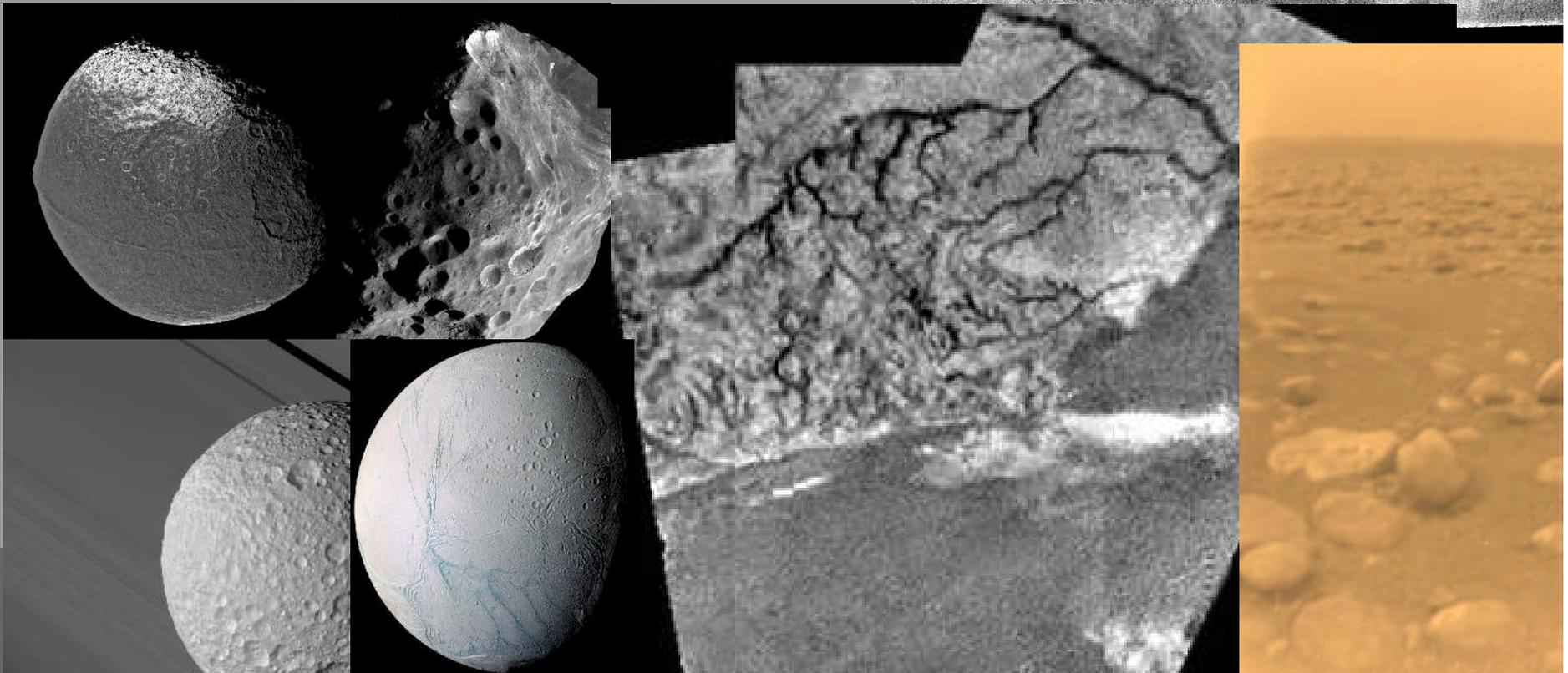
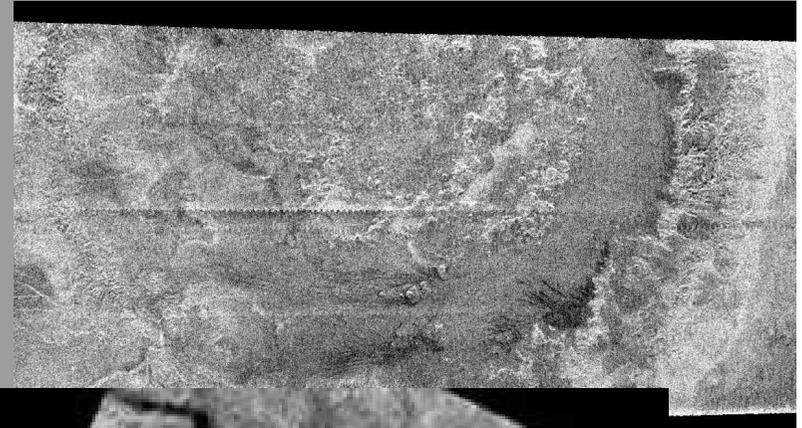
- Launched August 12, 2005
- Planned Mars orbit insertion March 10, 2006 followed by seven months of aero-breaking and two years of primary science mapping
- Will obtain highest spatial resolution imagery to date (30 cm/pixel), hyper-spectral imaging for mineralogy studies, climate signature information and subsurface sounding.



Cassini/Huygens

Continues Exploring Saturn and its Moons

Carried Huygens and communicated with it during Titan landing. Studying Titan with radar and multi-spectral imaging. Studying Saturn and its moons. 12 targeted flybys of Saturn's moons in 2005.



Spitzer Space Telescope Sees the Center of our Galaxy

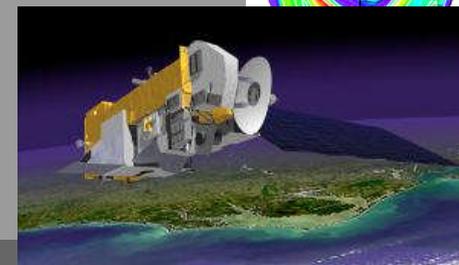
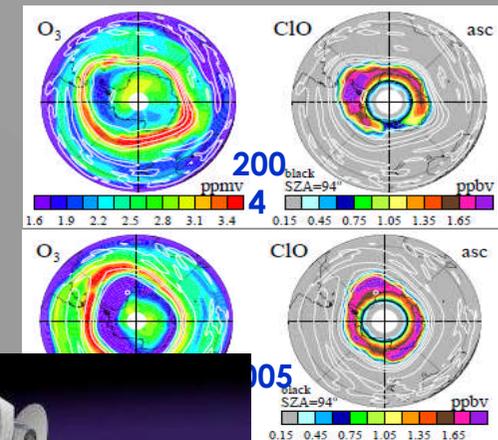
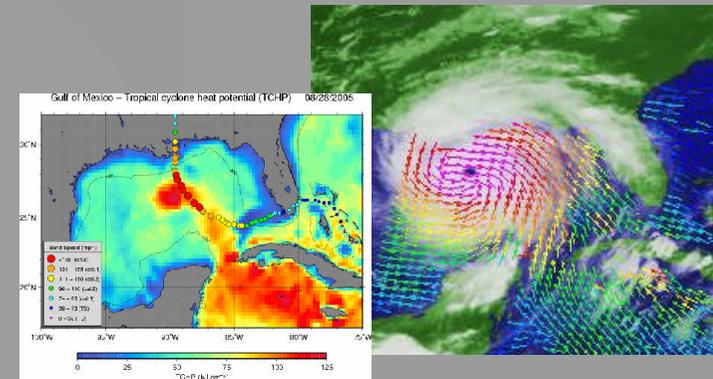


February 2006

FY'05 JPL Earth Science Programs (Partial List)

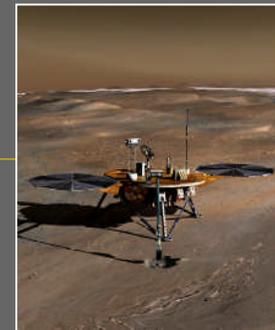
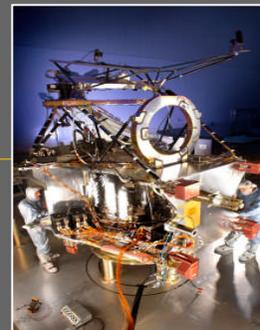
Heat potential derived from Jason 1 data is being used routinely by the *National Hurricane Center for Hurricane Prediction*.

Microwave Limb Sounder (MLS) data show, as of the end of August 2005, the Antarctic ozone hole is developing faster than in 2004.



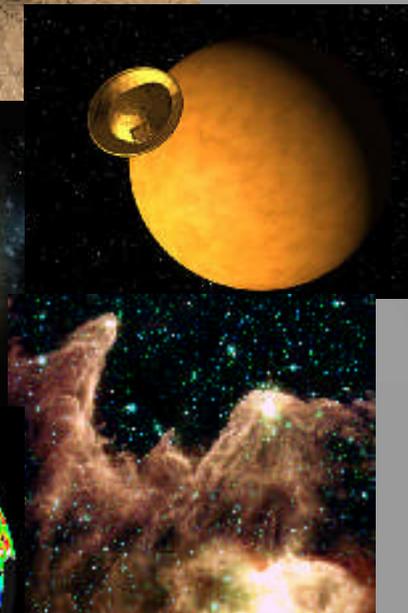
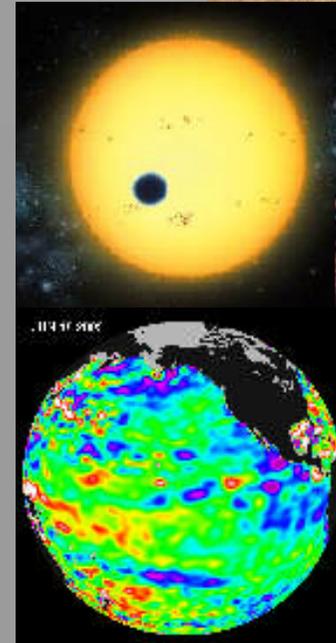
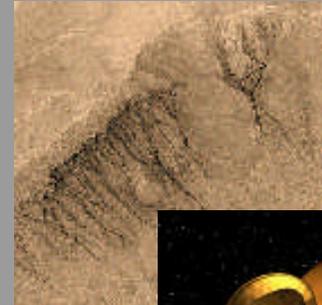
Looking Forward...

Where JPL is Going



Realizing the Potential of Space Science In Five Themes

- Mars Exploration: follow the water
- Life-friendly sites in the solar system
- Extra-solar planets
- Origins of galaxies and the universe
- Our home planet, Earth

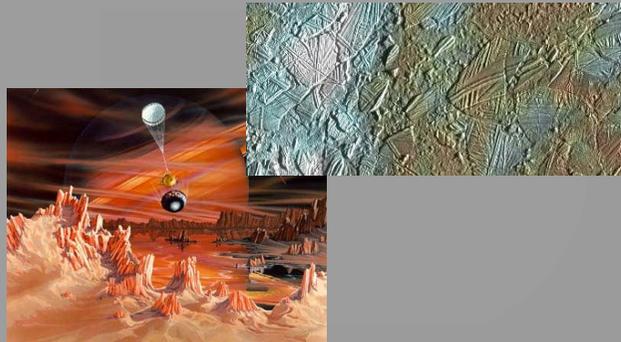


Our Vision: JPL's Legacy by 2020

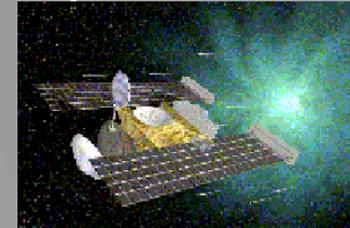
Established a continuous presence around and on the surface of Mars.



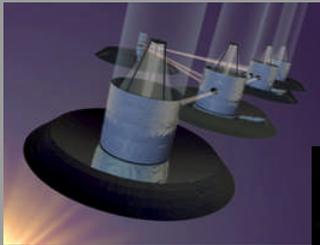
Explored the Jovian and Saturnian satellites in detail and probed their surfaces and interiors for possible pre-biotic and life-favorable environments.



Returned first samples from other solar system bodies beyond the moon.



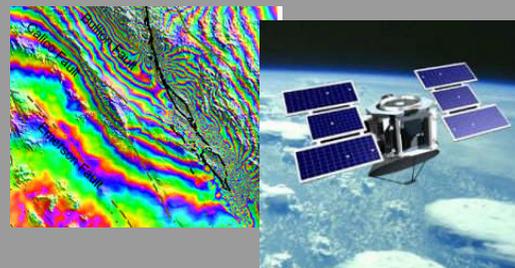
Began exploring neighboring solar systems.



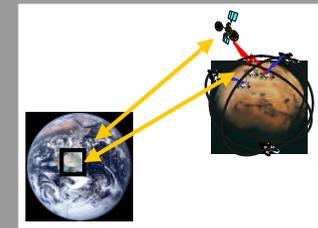
Explored the boundaries of physics to understand the forces which powered the Big Bang.



Established operational capability to monitor dynamics of solid Earth and its oceans and atmosphere.



Established the Interplanetary Network, which is being commonly used by students.



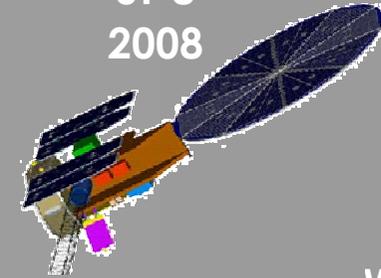
Missions Under Development

CloudSat
2006



Phoenix
2007

ST-8
2008



Ocean Surface
Topography Mission
2008



Orbiting Carbon
Observatory
2008



MSL
2009



WISE
2009



Kepler
2008



Aquarius
2009



Juno
2010



PlanetQuest Space
Interferometer Mission
2011-2015



Major Instruments Under Development



ST-7 DRS on
LISA pathfinder
2008



Advanced
microwave
radiometer on OSTM,
2008

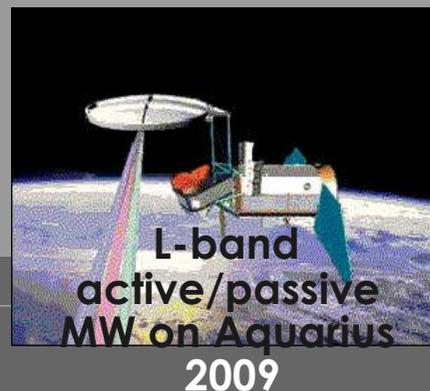
Diviner lunar radar
experiment 2008



CheMin on MSL
2009



High-res 3-channel
grating pectrometer
on OCO

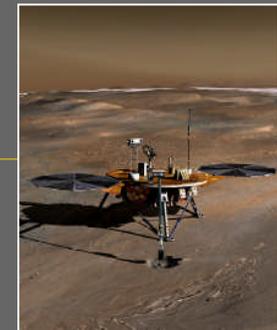
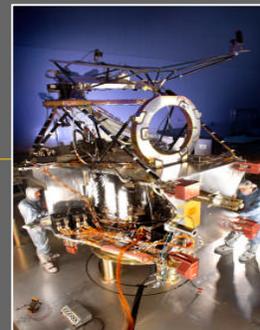


MW radiometer,
heat
magnetometer,
gravity science
on Juno
2010



Looking Forward...

How JPL is Going To Get There



We Can't Do This Alone

JPL Needs Your Partnership



Talk with prime
contractors in the
“Marketplace”

Network
with peers



Become
‘informed’ by
attending
workshops

Enjoy the conference.

